

---

U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

---

Gordon P. Eaton, Director

Reston, VA 20192

---

For information, contact:

Daniel Edelstein, Commodity Specialist

Telephone: (703) 648-4978, Fax: (703) 648-7757

E-mail: [dedelste@usgs.gov](mailto:dedelste@usgs.gov)

Stephen Frauenheim (Data), (703) 648-7977

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Inernet: <http://minerals.er.usgs.gov/minerals>

## COPPER IN SEPTEMBER 1996

Average daily copper mine production was unchanged in September, while average daily primary smelter and refinery production rose by 13% and 5%, respectively. An 11-day shutdown of BHP Copper Co.'s San Manuel, AZ, smelter had resulted in lower smelter and refinery production in August. Mine production for the first 9 months of 1996 was up by about 2% from the equivalent period in 1995, despite the closure of the White Pine and Pinos Altos mines during the third quarter of 1995. Increased production in 1996 resulted from startup of the Robinson Mine in Nevada and underground mining at the Mission complex in Arizona, as well as incremental expansions of the Inspiration and Morenci mines in Arizona, and the Continental Mine in New Mexico. Production of primary refined copper for the first 9 months of the year rose by 6% owing to increases in both electrolytic and electrowon production. Electrolytic production from foreign material increased significantly owing to a tolling arrangement between a Canadian smelter and the White Pine refinery, which continued to operate despite closure of its associated mine and smelter.

Copper price volatility continued in September, with average monthly prices falling to their lowest levels in more than 2 years and Comex spot prices trading over an 8-cent-per-pound range. The price slide occurred despite a global and domestic decline in copper inventories. World inventories of copper held in London Metal Exchange (LME) and Comex warehouses fell by 35,000 tons, to 259,000 tons. Domestic availability of copper was reported to be especially tight; Comex contracts in August and September traded at a premium to those on the London Metal Exchange. Industry speculation that Sumitomo Corp. was holding large inventories of copper that could be released to the market may have had a dampening effect on the market. However, prices failed to rebound following the mid-month announcement by Sumitomo that it had, for the most part, liquidated its inventories. Sumitomo also announced that it had increased the estimate of its trading losses upward from \$1.8

billion to \$2.6 billion.<sup>1</sup>

### Price Update

Copper prices, though continuing to fluctuate, on average rose during October, with the Comex price rising to over \$1.00 per pound for the first time since June. Comex prices remained at or below \$1.00 per pound during the first half of November, but regained upward momentum and closed the month at \$1.10 per pound. Combined Comex and LME Inventories at monthend fell to 127,000 tons, the lowest level in more than 6 years. An analysis of trade flow released in November by the World Bureau of Metal Statistics (WBMS), which indicated the "apparent" accumulation of a large quantity of unreported refined copper inventories in the Netherlands, failed to dampen the upward price movement. According to the WBMS analysis of official trade statistics, between 1990 and the end of 1995, receipts of refined copper by bonded warehouses in the Netherlands exceeded deliveries by more than one-half million tons, while over the same time period the LME reported a small decline in inventories. WBMS cautioned, however, that differences in timing and possible trade reporting errors could be at least partially responsible for these apparent unreported stocks. No physical evidence as to the existence of unreported inventories has been presented.

### Announcement

The International Copper Study Group (ICSG), in collaboration with the European Union, will sponsor **The World Conference on Copper Recycling**, March 3-4, 1997, in Brussels, Belgium. For information contact the ICSG in Lisbon, Portugal, at Tel: 351-1-352 4039 or Fax: 351-1-35 2 4035

---

<sup>1</sup>Platt's Metals Week. Sumitomo Says Position Unwound; Market Cautious. Sept. 23, 1996, p.1.

TABLE 1  
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless noted)

	Source table 2/	1995	1996		
			August	September	January- September
Production:					
Primary:					
Mine, recoverable	(2)	1,850,000	164,000 r/	159,000	1,420,000
Smelter 3/	(3)	1,240,000	97,200 r/	106,000	932,000
Refinery:					
Electrolytic:					
Domestic	(4)	1,310,000	107,000 r/	109,000	994,000
Foreign	(4)	77,300	7,370	8,820	79,600
Electrowon	(4)	539,000	47,100 r/	45,700	424,000
Total	(4)	1,930,000	161,000 r/	163,000	1,500,000
Secondary recoverable copper:					
Refineries	(5)	352,000	25,000	26,800	244,000
Ingot makers 4/	(5)	124,000 r/	10,300 r/	10,300	92,900
Brass and wire-rod mills	(5)	713,000	60,600	59,100	545,000
Foundries, etc.	(5)	62,400 r/	5,200 r/	5,200	46,800
Consumption:					
Total apparent	(8)	2,540,000	249,000	NA	NA
Refined (reported)	(7)	2,530,000	210,000 r/	223,000	1,970,000
Purchased copper-base scrap	(9)	1,650,000	136,000	136,000	1,240,000
Stocks at end of period:					
Total refined	(11)	163,000 r/	156,000 r/	144,000	XX
Blister, etc.	(11)	174,000	159,000 r/	165,000	XX
Prices:					
U.S. producer cathode (cents per pound)	(12)	138.333 r/	95.479 r/	93.848	111.494
Imports:					
Ores and concentrates 5/	(14)	127,000	6,120	NA	NA
Refined	(14)	429,000	64,800	NA	NA
Exports:					
Ores and concentrates 5/	(15)	239,000	9,630	NA	NA
Refined	(15)	217,000	17,700	NA	NA

r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices; may not add to totals shown.

2/ Numbers in parentheses refer to the detailed tables where these data are located.

3/ From domestic and foreign ores.

4/ 1996 monthly data estimated based on 1995 monthly average.

5/ Copper content.

TABLE 2  
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES 1/

(Metric tons)

State	1995						1996	
	August	September	October	November	December	Year total	January	February
Arizona	100,000	102,000	104,000	101,000	105,000	1,170,000 r/	104,000	93,000
Others 2/	63,500 r/	56,200 r/	51,000 r/	46,200 r/	45,700 r/	682,000 r/	50,500	47,900
Total	164,000	158,000 r/	155,000	148,000	151,000	1,850,000	155,000	141,000

  

State	1996						
	March	April	May	June	July	August r/	Jan. - Sept.
Arizona	108,000	103,000	107,000	106,000	104,000	106,000	932,000
Others 2/	55,800	53,500	53,700	56,100	57,200	58,800	492,000
Total	164,000	157,000	161,000	163,000	161,000	164,000	1,420,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes production from California, Idaho, Michigan, Missouri, Montana, Nevada, New Mexico, Utah, and Wisconsin.

TABLE 3  
COPPER 1/ PRODUCED AT SMELTERS IN THE UNITED STATES, BY SOURCE 2/

(Metric tons, copper content)

Period	Domestic and foreign ores	Scrap	Total
1995:			
September	100,000	28,700	129,000
October	114,000	33,900	148,000
November	105,000	33,700	139,000
December	106,000	35,100	141,000
Jan.-Sept.	919,000	255,000	1,170,000
Year total	1,240,000	358,000	1,600,000
1996:			
January	113,000	29,200	142,000
February	108,000	29,800	138,000
March	101,000	33,300	134,000
April	105,000	28,200	133,000
May	94,300	30,600	125,000
June	104,000	30,400	134,000
July	103,000	32,300	136,000
August	97,200 r/	29,100 r/	126,000
September	106,000	31,600	138,000
Jan.-Sept.	932,000	275,000	1,210,000

r/ Revised.

1/ Includes blister, anode and black copper from primary or secondary sources.

2/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 4  
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

Period	Primary materials				Scrap			Total refined
	Electrolytically refined 2/		Electrowon	Total	Electrolytically refined 2/	Fire refined	Total	
	Domestic 3/	Foreign						
1995:								
September	105,000	6,570	48,100	160,000	16,300	11,900	28,100	188,000
October	109,000	8,490	50,400	168,000	16,000	11,700	27,700	196,000
November	116,000	6,330	49,600	172,000	16,100	12,900	29,000	201,000
December	112,000	7,340	50,700	170,000	16,000	11,100	27,100	197,000
Jan.-Sept.	973,000	55,100	389,000	1,420,000	166,000	102,000	268,000	1,690,000
Year total	1,310,000	77,300	539,000	1,930,000	215,000	137,000	352,000	2,280,000
1996:								
January	117,000	11,300	47,500	176,000	14,300	13,400	27,700	204,000
February	107,000	9,990	43,500	161,000	13,700	12,800	26,400	187,000
March	112,000	9,570	45,900	168,000	14,200	14,000	28,200	196,000
April	115,000	9,790	47,400	173,000	14,200	10,400	24,700	197,000
May	112,000	9,500	50,700	172,000	16,900	12,700	29,600	202,000
June	98,800	5,180	48,300	152,000	17,300	13,700	30,900	183,000
July	115,000	8,090	48,200	172,000	18,100	6,310	24,400	196,000
August	107,000 r/	7,370	47,100 r/	161,000 r/	14,000	11,000	25,000	186,000 r/
September	109,000	8,820	45,700	163,000	12,900	13,900	26,800	190,000
Jan.-Sept.	994,000	79,600	424,000	1,500,000	136,000	108,000	244,000	1,740,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Based on source of material at smelter level.

3/ Includes fire-refined copper.

TABLE 5  
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASED SCRAP 1/

(Metric tons, copper content)

Period	Refineries 2/		Ingot makers 3/		Brass and wire-rod mills		Foundries, etc. 4/		Total 5/
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
1995:									
September	9,160	19,000	2,890 r/	7,440 r/	52,500	4,550	2,240 r/	2,960 r/	101,000
October	9,500	18,200	2,890 r/	7,440 r/	56,300	4,090	2,240 r/	2,960 r/	104,000
November	10,100	18,900	2,890 r/	7,440 r/	54,600	3,650	2,240 r/	2,960 r/	103,000
December	8,870	18,200	2,890 r/	7,440 r/	45,400	3,650	2,240 r/	2,960 r/	91,700
Jan.- Sept.	83,200	185,000	26,000	66,900	507,000	37,900	20,100	26,700	953,000
Year total	112,000	240,000	34,700 r/	89,200 r/	664,000	49,300	26,900 r/	35,600 r/	1,250,000
1996:									
January	11,100	16,600	2,890 r/	7,440 r/	59,400	3,350	2,240 r/	2,960 r/	106,000
February	9,790	16,600	2,890 r/	7,440 r/	54,000	2,980	2,240 r/	2,960 r/	99,000 r/
March	11,100	17,200	2,890 r/	7,440 r/	57,600	2,660	2,240 r/	2,960 r/	104,000
April	8,200	16,500	2,890 r/	7,440 r/	57,400	4,240	2,240 r/	2,960 r/	102,000
May	10,000	19,600	2,890 r/	7,440 r/	60,100	4,230	2,240 r/	2,960 r/	109,000
June	10,900	20,000	2,890 r/	7,440 r/	58,700	4,960	2,240 r/	2,960 r/	110,000
July	6,010	18,400	2,890 r/	7,440 r/	51,500 r/	3,880	2,240 r/	2,960 r/	95,300 r/
August	8,310	16,700	2,890 r/	7,440 r/	56,700 r/	3,870	2,240 r/	2,960 r/	101,000
September	10,300	16,500	2,890	7,440	55,300	3,850	2,240	2,960	101,000
Jan.- Sept.	85,700	158,000	26,000	66,900	511,000	34,000	20,100	26,700	928,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Electrolytically refined and fire-refined scrap based on source of material at smelter level.

3/ Data no longer collected monthly; 1995 and 1996 data estimated based on 1995 annual data.

4/ Estimate based on 1995 annual data.

5/ Does not include an estimate, based on reported 1995 data, of 3,100 tons per month from new scrap and 2,330 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6  
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire rod mills	Brass mills	Wire rod mills	Brass mills	Wire rod mills
1995:						
September	116,000	163,000	116,000	163,000	49,600	57,600
October	120,000	161,000	118,000	154,000	51,300	64,900
November	113,000	143,000	118,000	141,000	46,400	67,300
December	105,000	134,000	98,600	132,000	52,500	69,100
Jan.- Sept.	1,080,000	1,380,000	1,100,000	1,400,000	XX	XX
Year total	1,420,000	1,820,000	1,430,000	1,820,000	XX	XX
1996:						
January	120,000	146,000	122,000	147,000	50,100	68,200
February	128,000	155,000	130,000	158,000	48,800	64,900
March	144,000	173,000	142,000	161,000	51,300	76,200
April	131,000	158,000	133,000	177,000	49,400	57,600
May	130,000	174,000	129,000	166,000	51,000	65,200
June	136,000	164,000	132,000	152,000	54,900	76,900
July	114,000	141,000	116,000	152,000 r/	52,300	65,300 r/
August	130,000	143,000 r/	133,000 r/	158,000	49,700 r/	50,300 r/
September	136,000	164,000	137,000	159,000	48,600	55,100
Jan.- Sept.	1,170,000	1,420,000	1,170,000	1,430,000	XX	XX

r/ Revised. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 7  
CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

Period and item	Wire rod mills	Brass mills 2/	Other plants 3/	Total
1995:				
September	169,000	44,400	4,630 r/	218,000
October	163,000	44,000	4,630 r/	212,000 r/
November	150,000	44,400	4,630 r/	199,000 r/
December	132,000	40,700	4,630 r/	177,000 r/
Jan.-Sept.	1,500,000	404,000	35,300	1,940,000
Year total	1,950,000	533,000	49,900 r/	2,530,000
1996:				
January	155,000	45,100	4,630 r/	205,000 r/
February	166,000	47,200	4,630 r/	218,000 r/
March	183,000	56,400	4,630 r/	244,000
April	164,000	47,500	4,630 r/	216,000 r/
May	185,000	47,500	4,630 r/	237,000 r/
June	165,000	49,600	4,630 r/	219,000
July	148,000	43,600 r/	4,630 r/	196,000
August r/	155,000	50,700	4,630	210,000
September:				
Cathodes	163,000	31,900	1,120	196,000
Wire bars	--	W	W	W
Ingots and ingot bars	--	1,600	1,660	3,250
Cakes and slabs	--	8,040	W	8,040
Billets and other	--	13,900	1,860	15,700
Total	163,000	55,400	4,630	223,000
Jan.-Sept.	1,480,000	443,000	41,700	1,970,000

r/Revised. W Withheld to avoid disclosing company proprietary data; included in "Billets and other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ In 1995, brass mills consumed 2,210 tons of refined lead, 706 tons of pig tin, 3,870 tons of refined nickel, and 64,100 tons of slab zinc.

3/ Monthly consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers; estimated based on 1995 annual data.

TABLE 8  
U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

Period	Refined copper production	Copper in old scrap 2/	Net refined imports	Stock change during period	Apparent consumption
1995:					
September	160,000	36,300 r/	16,500	6,270	207,000
October	168,000	35,100 r/	29,600	(2,050)	235,000
November	172,000	35,300 r/	31,900	5,380	234,000
December	170,000	34,600 r/	30,800	30,900	205,000
Jan.-Aug.	1,260,000	301,000	103,000	4,040	1,660,000
Year total	1,930,000	442,000 r/	211,000	44,500	2,540,000
1996:					
January	176,000	32,700 r/	29,400	28,600	210,000
February	161,000	32,300 r/	24,800	(21,300)	239,000
March	168,000	32,600 r/	35,500	(7,160)	243,000
April	173,000	33,400 r/	37,300	10,800	232,000 r/
May	172,000	36,500 r/	46,000	(26,400)	281,000 r/
June	152,000	37,700 r/	33,900	(7,580)	232,000
July	172,000	35,000 r/	38,000	23,400 r/	221,000 r/
August	161,000 r/	33,300 r/	47,100	(7,060)r/	249,000
September	163,000	33,100	NA	(12,600)	NA
Jan.-Aug.	1,330,000	274,000	292,000	(6,690)	1,910,000

r/ Revised. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes reported monthly production of copper from old scrap of copper-base and of non-copper-base materials and estimates for annual reporters based on 1995 data.

TABLE 9  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers 2/		Brass and wire-rod mills 3/		Foundries, etc. e/		Total scrap used
	New scrap 2/	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
1995:									
September	10,600	31,600	3,870 r/	11,300 r/	64,900	5,460	2,570 r/	3,390 r/	134,000 r/
October	10,800	29,800	3,870 r/	11,300 r/	70,100	4,950	2,570 r/	3,390 r/	137,000 r/
November	12,300	29,400	3,870 r/	11,300 r/	68,300	4,380	2,570 r/	3,390 r/	136,000 r/
December	10,100	32,100	3,870 r/	11,300 r/	57,100	4,460	2,570 r/	3,390 r/	125,000
Jan.- Sept.	95,200	294,000	34,800	102,000	631,000	45,600	23,100	30,500	1,260,000
Year total	128,000	385,000	46,400 r/	136,000 r/	827,000	59,400	30,800 r/	40,600 r/	1,650,000
1996:									
January	12,600	26,600	3,870 r/	11,300 r/	74,300	4,100	2,570 r/	3,390 r/	139,000 r/
February	10,700	28,200	3,870 r/	11,300 r/	68,200	3,830	2,570 r/	3,390 r/	132,000
March	11,700	32,200	3,870 r/	11,300 r/	72,300	3,570	2,570 r/	3,390 r/	141,000
April	9,680	26,800	3,870 r/	11,300 r/	71,900	5,000	2,570 r/	3,390 r/	134,000 r/
May	10,800	31,400	3,870 r/	11,300 r/	75,500	5,100	2,570 r/	3,390 r/	144,000
June	13,200	36,300	3,870 r/	11,300 r/	73,500	5,990	2,570 r/	3,390 r/	150,000
July	8,120	27,900	3,870 r/	11,300 r/	65,500 r/	4,790	2,570 r/	3,390 r/	127,000
August	10,000	28,300 r/	3,870 r/	11,300 r/	72,000 r/	4,880	2,570 r/	3,390 r/	136,000
September	12,700	27,000	3,870	11,300	70,200	5,010	2,570	3,390	136,000
Jan.- Sept.	99,500	265,000	34,800	102,000	643,000	42,300	23,100	30,500	1,240,000

e/ Estimated. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Data for 1995 and 1996 are estimated from 1995 annual data.

3/ Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/ 2/

(Metric tons, gross weight)

Scrap type and processor	1995		1996			
	Jan.-Sept.	Year total 3/	July	August	September	Jan.-Sept.
No. 1 wire and heavy:						
Smelters and refiners	111,000	161,000 r/	6,910 r/	11,600 r/	14,600	113,000
Brass and wire-rod mills	287,000	375,000	27,400	28,300 r/	27,400	270,000
No. 2 mixed heavy and light:						
Smelters and refiners	158,000	225,000 r/	17,900 r/	16,000 r/	14,500	157,000
Brass and wire-rod mills	26,700	33,400	2,670 r/	2,900 r/	3,070	27,400
Total unalloyed scrap:						
Smelters and refiners	269,000	386,000 r/	24,900 r/	27,500 r/	29,100	270,000
Brass mills	280,000	408,000	30,100 r/	31,200 r/	30,400	297,000
Red brass: 4/						
All plants	18,600	66,200 r/	5,380 r/	5,540 r/	5,400	49,000
Leaded yellow brass:						
All plants	263,000	367,000 r/	33,500 r/	34,800 r/	33,700	301,000
Yellow and low brass:						
Smelters and refiners	(5/)	(5/)	(5/)	(5/)	(5/)	(5/)
Brass mills	34,200	47,500	3,950	4,290	4,400	38,800
Cartridge cases and brass:						
Smelters and refiners	--	--	--	--	--	--
Brass mills	38,600	49,400	2,160 r/	3,570 r/	3,750	33,600
Auto radiators:						
Smelters and refiners	14,600	73,000 r/	6,080 r/	6,080 r/	6,080	54,800
Bronzes:						
Smelters and refiners	--	--	--	--	--	--
Brass mills	8,690	11,300	555	1,050	868	8,150
Nickel-copper alloys:						
Smelters and refiners	--	--	--	--	--	--
Brass mills	13,500	17,700	1,450 r/	3,170 r/	3,380	18,300
Low grade & residues:						
Smelters and refiners	61,500	91,800 r/	8,120 r/	7,410 r/	7,620	66,200
Other alloy scrap: 6/						
Smelters and refiners	30,000	39,700 r/	3,370 r/	3,710 r/	3,290	31,100
Brass mills	2,940	3,920	328 r/	358 r/	314	3,280
Total alloyed scrap:						
Smelters and refiners	123,000	310,000 r/	26,400 r/	26,000 r/	25,800	231,000
Brass mills	364,000	478,000	40,200 r/	45,700 r/	44,700	388,000
Total scrap:						
Smelters and refiners	392,000	695,000 r/	51,200 r/	53,500 r/	54,900	501,000
Brass and wire-rod mills	677,000	886,000	70,300 r/	76,900 r/	75,200	686,000

r/ Revised.

1/ Does not include: consumption by ingot makers, foundries, chemical plants and miscellaneous manufacturers, estimated to total about 20,800 tons of scrap per month in 1995; consumption of home scrap at brass mills which averaged 57,200 tons per month in 1995; includes estimated consumption of 15,200 tons per month by several copper smelting plants that reported only on an annual basis in 1995.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Annual data for smelters and refineries includes consumption by ingot makers, foundries, chemical plants and miscellaneous manufacturers.

4/ Includes composition turnings, silicon bronze, zinc bronze, railroad car boxes, cocks and faucets, gilding metal and commercial bronze.

5/ Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap."

6/ Includes refinery brass, beryllium copper, phosphor copper and aluminum bronze.

TABLE 11  
COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

Period	Crude copper 2/	Refined copper					LME 6/	Total refined
		Refineries 3/	Wire rod mills 3/	Brass mills 3/	Other 4/	Comex 5/		
1995:								
September	170,000	38,500	24,900	11,500	3,540 r/	10,100	40,300	129,000
October	180,000	39,600	24,900	12,100	3,540 r/	5,540	41,200	127,000
November	170,000	37,900	26,700	11,700	3,540 r/	4,900	47,500	132,000 r/
December	174,000	38,000	24,800	7,110	3,540 r/	21,500	68,200	163,000 r/
1996:								
January	172,000	35,700	34,500	10,400	3,540 r/	11,000	96,700	192,000
February	177,000	31,700	22,600	11,200	3,540 r/	11,700	89,600	170,000 r/
March	153,000	33,800	19,500	9,820	3,540 r/	12,600	84,000	163,000 r/
April	171,000	35,600	25,500	11,300	3,540 r/	18,800	79,400	174,000 r/
May	166,000	35,500	19,200	9,840	3,540 r/	12,000	67,500	148,000
June	162,000	33,500	13,100	12,600	3,540 r/	6,880	70,400	140,000 r/
July	154,000	41,700 r/	29,900	13,500	3,540 r/	16,100	58,700	163,000 r/
August	159,000 r/	34,000 r/	25,800 r/	13,400 r/	3,540 r/	20,100	59,600	156,000 r/
September	165,000	32,600	19,400	12,600	3,540	19,700	56,000	144,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Copper content of blister and other materials in transit and in process of refining.

3/ Stocks of refined copper as reported; no estimates are made for non-respondents.

4/ Monthly estimates based on reported and 1995 annual data, comprising stocks at secondary smelters, chemical plants, foundries, and miscellaneous manufacturers.

5/ Commodity Exchange Inc., New York.

6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12  
AVERAGE PRICE OF COPPER IN THE UNITED STATES AND  
ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price		Comex first position 3/	L.M.E. cash price Grade A
	Cathode 1/	Wirebar 2/		
1995:				
October	131.380	139.995	127.996	127.582
November	139.860	148.500	136.500	134.986
December	135.103	143.778	131.778	132.683
Average	138.333	146.724	134.717	133.122
1996:				
January	121.431	130.090	118.091	118.622
February	120.020	128.668	116.668	115.077
March	121.540	130.200	118.200	116.140
April	122.628	131.286	119.286	117.707
May	126.667	135.327	123.327	120.527
June	107.828	116.538	104.488	98.447
July	94.007	102.693	90.667	90.006
August	95.479	104.139	92.139	91.072
September	93.848	102.623	90.508	88.026
October	96.873	105.533	95.533	88.935
Average	110.032	118.710	106.891	104.456

1/ Listed as "U.S. producer cathode."

2/ Listed as "Electrolytic wirebar (Warrenton Refining Co.)."

3/ Listed as "Comex high grade first position."

Sources: Platt's Metals Week and American Metal Market.



TABLE 13  
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
1995:				
October	120.17	104.50	92.27	67.00
November	125.91	106.96	91.80	66.00
December	120.89	103.96	92.00	66.00
Average	123.28	104.73	91.26	63.38
1996:				
January	112.46	95.09	87.98	57.86
February	111.85	93.83	89.75	57.00
March	113.06	96.54	92.53	57.66
April	114.20	96.99	84.43	58.00
May	116.25	97.10	84.59	57.84
June	96.95	83.00	77.85	55.35
July	88.58	69.76	64.43	46.79
August	90.85	73.93	64.00	46.09
September	88.69	72.56	64.00	46.00
Average	103.65	86.53	78.84	53.62

Source: American Metal Market.

TABLE 14  
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	1995	1996		1995	1996		1995	1996		1995	1996	
		Aug.	Jan.-Aug.		Aug.	Jan.-Aug.		Aug.	Jan.-Aug.		Aug.	Jan.-Aug.
Brazil	--	--	--	--	--	--	--	--	--	15,500	--	13,600
Canada	(2/)	4,360	8,730	590	3	178	40,000	660	3,270	283,000	28,500	236,000
Chile	80,400	--	52,400	--	--	--	38,000	6,650	35,500	29,100	15,400	66,600
Germany	--	--	--	--	--	--	--	--	--	12,300	17	17
Japan	--	--	--	4	--	--	(2/)	--	--	7,740	53	1,990
Malaysia	--	--	--	55	--	79	--	--	--	--	--	--
Mexico	11,700	1,760	2,040	2,190	135	1,490	2,350	482	18,800	58,600	1,150	25,600
Peru	34,900	--	--	--	--	--	10,400	--	--	9,860	18,400	46,900
Russia	--	--	--	--	--	--	--	--	--	11,600	1,050	5,920
South Africa	1	--	--	11	--	--	--	--	638	2	100	102
Spain	--	--	--	--	--	--	3,260	--	2,210	--	--	--
Taiwan	--	--	--	1	3	22	--	--	--	--	--	--
Other	1	--	3	2	--	1	--	10	11	618	111	5,260
Total	127,000	6,120	63,200	2,860	141	1,770	94,100	7,800	60,400	429,000	64,800	402,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 15  
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	1996			1996			1996			1996		
	1995	Aug.	Jan.-Aug.	1995	Aug.	Jan.-Aug.	1995	Aug.	Jan.-Aug.	1995	Aug.	Jan.-Aug.
Belgium	1,980	--	--	1,330	--	3	81	--	239	2,260	--	37
Canada	123,000	9,550	60,800	30,400	3,380	24,200	24,800	2,020	13,500	22,900	1,790	20,100
China	37,100	--	51,800	17	--	--	211	18	44	5,130	--	--
Germany	--	71	72	152	1	1	84	44	385	629	19	97
Hong Kong	--	--	16	48	--	29	650	--	372	4,710	63	442
Italy	--	--	8	--	--	--	245	2	426	1,580	--	2,150
Japan	53,500	--	5,530	1,880	70	1,800	363	--	390	52,800	5,390	21,600
Korea, Republic of	5,520	--	2	10	--	10	1,440	--	420	11,200	17	2,340
Malaysia	--	--	--	--	--	--	--	--	--	4,110	676	5,420
Mexico	160	--	2,340	763	16	767	219	44	268	2,710	538	3,150
Peru	1,180	--	1,750	9	--	--	--	--	--	--	--	129
Philippines	16,000	--	--	--	--	--	20	--	11	3	--	--
Singapore	5	--	--	18	--	--	39	--	40	12,700	23	1,050
Taiwan	--	--	--	201	--	--	137	--	161	75,000	5,900	32,700
Thailand	34	--	--	--	--	--	124	--	58	18,700	3,220	20,300
Venezuela	--	--	--	--	--	--	860	--	6	27	5	25
Other	341	4	242	220	27	525	226	86	274	3,030	47	634
Total	239,000	9,630	122,000	35,100	3,500	27,400	29,500	2,210	16,600	217,000	17,700	110,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 16  
U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

Country or territory	Imports						Exports					
	Unalloyed			Alloyed			Unalloyed			Alloyed		
	1996			1996			1996			1996		
	1995	Aug.	Jan.-Aug.	1995	Aug.	Jan.-Aug.	1995	Aug.	Jan.-Aug.	1995	Aug.	Jan.-Aug.
Belgium	11	--	--	294	--	--	2,730	3,430	8,050	3,030 r/	44	1,040
Canada	36,600	3,350	25,800	64,600	4,490	38,500	110,000	6,400	67,200	42,600 r/	3,040	28,100
Chile	9,270	1,020	7,750	66	--	129	--	--	--	7 r/	--	3
China	--	--	--	21	--	62	28,000	624	9,050	50,100 r/	1,190	19,100
Colombia	325	24	436	1,280	94	2,210	--	--	--	9 r/	--	3
Costa Rica	848	50	913	524	29	295	--	--	--	--	--	--
Dominican Republic	702	64	312	1,860	160	1,430	--	--	--	--	--	--
Germany	--	--	3	64	20	122	1,580	2,870	3,280	4,310 r/	1,970	3,930
Hong Kong	--	--	--	23	1	112	31,400	2,280	20,900	30,900 r/	3,300	32,600
India	--	--	--	--	--	--	7,020	162	3,620	42,500 r/	3,320	19,200
Jamaica	775	64	489	412	90	404	--	--	--	--	--	--
Japan	--	--	--	124	16	35	20,000	2,200	12,100	16,700 r/	2,430	10,600
Korea, Republic of	--	--	--	14	--	--	10,300	107	3,950	24,100 r/	562	8,010
Mexico	32,800	1,690	20,300	50,500	2,650	30,800	6,470	18	2,410	1,710 r/	173	3,400
Panama	1,170	109	627	776	67	721	--	--	--	--	--	--
Sweden	--	--	--	--	17	177	--	--	--	1,110	98	1,530
Switzerland	--	--	--	--	--	--	17	2,250	2,760	140	--	18
Taiwan	--	3	35	2,940	162	993	1,680	75	566	3,730 r/	271	3,330
Thailand	--	--	--	8	--	36	--	--	37	2,490 r/	112	1,330
United Kingdom	111	--	--	201	122	874	338	--	194	2,810 r/	18	209
Venezuela	3,260	78	2,160	2,860	112	1,870	--	--	--	22 r/	22	40
Other	2,220 r/	145	2,170	6,990 r/	584	5,450	3,570 r/	21	391	7,120 r/	365	4,550
Total 1/	88,100	6,590	61,000	134,000	8,620	84,300	223,000	20,400	135,000	233,000 r/	16,900	137,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.